Claims

1) Method for managing phone numbers attribution after replacement of a first portable object (SCA), particularly a SIM card, by a second portable object (SCB), said first portable object (SCA) being coupled to a communication device (CD) being able to communicate with a network, said first portable object (SCA) storing at least one parameter ($IMSI_A$, ADM_A, Ki_A) attached to a first current phone number ($MSISDN_A$), characterized in that it comprises the following steps:
2) A service-inserting step, in which the second portable object (SCB) storing at least one parameter ($IMSI_B$, ADM_B, Ki_B) attached to the second phone number ($MSISDN_B$) is inserted in the communication device (CD);
3) A service-replacing step, in which an application server (AS) sends a message (M2) for replacing, in the second portable object (SCB), parameters ($IMSI_B$, ADM_B, Ki_B) attached to the second phone number ($MSISDN_B$) by parameters ($IMSI_A$, ADM_A, Ki_A) attached to the first phone number ($MSISDN_A$);
4) A service-using step, in which the user now uses the second portable object (SCB) with the phone number ($MSISDN_A$) previously attached to the first portable object (SCA).

5) Method according to claim 1, characterized in that, for the service-information step, the communication device (CD), while containing first portable object (SCA), sends a message (step 1) to an application server (AS), this message including at least one parameter (MSISDNB) identifying the phone number assigned to said second portable object (SCB), which will be used to replace the first portable object (SCA).

6) Method according to claim 1, characterized in that, before the service-inserting step, the application server (AS) sends a secure message (step 3) for deleting, in the first portable object (SCA), parameters ($IMSI_A$, ADM_A ,Ki_A) attached to the first phone number ($MSISDN_A$).

7) Method according to claim 3, characterized in that the message (M3) is encrypted, the encryption being performed by using an encryption key attached to the portable object (SCA), and by using an algorithm that resides both on the Application Server (AS), and on the portable object (SCA).

8) Method according to claim 1, characterized in that, for the service replacing step, the application server (AS) sends a secure message (M3) to said second portable object (SCB).

9) Method according to claim 5, characterized in that the message is encrypted, the encryption being performed by using an encryption key attached to the second portable object (SCB), and by using an algorithm that resides both on the Application Server (AS), and on the second portable object (SCB).

10) Method according to claim 1, characterized in that, for the service using step, the communication device (CD) logs on to the network using said second portable object (SCB) and said old parameters ($MSISDN_A$, $IMSI_A$, ADM_A, Ki_A).

11) Application server (AS) able to communication with a communication device (CD), said server storing all the parameters attached to at least two portable objects, a first portable object (SCA) to be replaced and a

second portable object (SCB), characterized in that it comprises a program able to perform the following steps:

a. A receiving step, in which the server receives a message from said first portable object (SCA), said message requesting a replacement of said first portable object by the second portable object;
b. A sending step, in which the application server (AS) sends, after the user has inserted said second portable object in said communication device, a message (M2) for replacing, in said second portable object (SCB), parameters ($IMSI_B$, ADM_B, Ki_B) attached to the second phone number ($MSISDN_B$) by parameters ($IMSI_A$, ADM_A, Ki_A) attached to the first phone number ($MSISDN_A$);

12) A portable object (SCB) comprising parameters ($IMSI_B$, ADM_B, Ki_B) attached to a phone number ($MSISDN_B$) in particular a SIM card, characterized in that it comprises a microcontroller including a program for performing the following steps:

a. A receiving step in which said microcontroller receives a request for modifying some parameters ($IMSI_B$, ADM_B, Ki_B) attached to said phone number ($MSISDN_B$) by new parameters ($IMSI_A$, ADM_A, Ki_A) attached to another first phone number ($MSISDN_A$);
b. A using step, in which, once the parameters are modified, the portable object uses new parameters when communicating with the network (AS).